Alaska Assessment Program

Guide to Test Interpretation for the Benchmark Examinations

for Teachers and Staff

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42029

Letter From the Commissioner

Dear Alaskans:

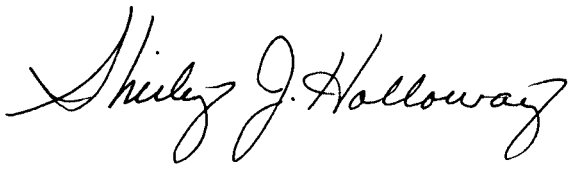
In 1997 and 1998, the Alaska State Legislature enacted laws that require the assessment of Alaska students to ensure accountability of Alaska's public schools. To achieve this goal, the Department of Education & Early Development established the Comprehensive System of Student Assessments as the primary tool for assessing the academic achievement of our students. The system consists of the Benchmark Examinations at Grades 3, 6, and 8, and the High School Graduation Qualifying Examination.

The examinations will provide student, class, school, and district information that can be used to help make decisions. These decisions range from specifics such as choosing academic areas in which a particular student needs tutorial assistance to modifying district curriculum.

This publication provides information that will assist you in understanding the results of the Benchmark Examinations. I invite you to spend time becoming familiar with the wealth of information provided by these assessments.

I hope that this information will encourage schools and communities throughout Alaska in their continuing efforts to improve the quality of education for all students.

Sincerely,



Shirley J. Holloway
Commissioner of Education & Early Development

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This Interpretive Guide has been prepared by CTB to provide an overview of reporting for the Alaska Benchmark Examinations. It is intended to help educators apply test report data to the needs of individual students and the district as a whole. The following information is included:

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Explanation of Examinations and Scoring

The Purpose of Testing

One of the principal purposes of a school testing program is to provide teachers with information to help students learn. Testing, or "assessment," plays a vital role in today's education environment. Assessment results are often a major force in shaping public perceptions about the capabilities of our students and the quality of our schools. As a primary tool for educators and policy makers, assessment is used for many important purposes. Educators use assessment results to help improve teaching and learning. They use them to evaluate programs and schools. Assessment is also used to generate the data upon which policy decisions are made. Because of the important functions it performs, educational assessment is a fundamental activity in every school, district, and state. It is a vital complement to innovation, higher standards, and educational excellence.

The Alaska Benchmark Examinations resulted from many years of intense effort and collaboration among teachers, administrators, and the Alaska State Board of Education. The proficiency levels of each examination were designed to reflect what students should know as a result of their public school experience.

How Results Are Measured

Students are tested on Content Standards and Performance Standards. Content Standards are broad statements of what students should know and be able to do. For example, in the Writing content area, one Content Standard is that a student should be able to speak and write well for a variety of purposes and audiences. Performance Standards are measurable statements of what students should know and be able to do. For example, in the Mathematics content area, part of the Statistics and Probability standard is that students should be able to:

- in Benchmark 1, use the terms "maximum" and "minimum" when working with a data set;
- in Benchmark 2, present the data using a variety of appropriate representations and explain the meaning of the data; and
- in Benchmark 3, interpret and analyze data found in newspapers, magazines, and graphical displays.

These education standards were developed by Alaska teachers, for Alaska students. To inform Alaskans about the standards, the Department of Education & Early Development has published and issued a booklet, *Alaska Standards: Content and Performance Standards for Alaska Students.*

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Components of the Benchmark Examinations

The following content areas are covered in the Benchmark Examinations:

Reading

Excerpts from published literature are the basis for evaluating students' reading skills. As students read fiction and nonfiction passages, interviews, poems, and articles, they answer questions assessing skills such as reading comprehension, identification of support for main ideas, and the use of techniques and narrative elements. Multiple-choice questions target specific skills, and short- and extended-response questions allow students to elaborate on and make comparisons between various aspects of the texts.

Writing

Basic and higher-order skills essential for effective written communication are combined in one test. These skills include writing compositions, using conventions of standard English (spelling, grammar, capitalization, and punctuation), and revising writing to improve expression. Multiple-choice questions evaluate specific aspects of writing skill, and short- and extended-response writing prompts ask students to write and edit narrative, descriptive, and persuasive essays on various topics.

Mathematics

Real-world topics engage students' interest, provide context, and encourage confidence in their ability to do mathematics. Procedures such as estimation and mental computation are interwoven throughout the test. Computation questions are included, with many of them set in realistic situations to provide students with a sense of purpose. Reading, interpreting, and constructing graphs, and principles of geometry and measurement are also assessed. Additionally, students use different cardboard manipulatives (coins, geometric shapes, rulers, or protractors) for some items in the test.

Each content area contains multiple-choice questions with four possible answer choices. These answers are machine-scored. Short- and extended-response questions allow students to demonstrate their skills in more complex levels of thinking, and are scored by a professional staff experienced in providing reliable and consistent hand-scoring. Extended-response questions appear in each content area. All the short- and extended-response questions allow for full or partial credit.

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Using Results

The Benchmark Examinations results and reports provide useful information for determining the performance of students in your school and classroom. This booklet will also help you prepare for questions from parents, students, and other members of the educational community regarding the Benchmark Examinations results.

Each report is designed to present clearly the information most useful to you and to parents and students. The audience and student populations for each of the Benchmark Examinations reports are listed below, with the quantity of each report a state or district will receive.

Benchmark Examinations Report Information

REPORT	NUMBER OF COPIES
For Schools—Teachers and Administrators	
Guide to Test Interpretation for Teachers and Staff	2
Guide to Test Interpretation for Parents and Students	1 per student
Benchmark Examinations Results Labels	1
Performance Level Summary Report	1
Student Report	2
School Proficiency Roster	1
Standards Performance Report	1
Standards Performance Summary	1
Inventory Report	1
For Districts	
Guide to Test Interpretation for Parents and Students	1
Guide to Test Interpretation for Teachers and Staff	1
File Layout for General Research Tape	1
Performance Level Summary Report	1
Performance Level Summary Report (by School)	1
Standards Performance Summary	1
Standards Performance Report (by School)	1
Inventory Report	1
Inventory Report (by School)	1
Individual General Research Tape (by Class)*	1
Summary General Research Tape (by Class)*	1

*These files may be purchased from CTB/McGraw-Hill. They are available on different media, including diskette, CD-ROM, and electronic files via e-mail.

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Sample Reports

Features Included on All Reports

A The test assessment series name always appears here for easy identification.

B The name of the report is presented next. In this example it is the Student Report.

C This area of the report is reserved for the name of the individual or group taking the assessment.

D The grade level of the individual or group is always included on the report. Each report contains results for one grade level.

E This is where the title of a subpopulation is printed. For example, if this report were produced for students who coded "male" on their answer documents, and a "male" report were ordered, this is where "male" would appear.

F Every report contains a purpose statement (the reason for the report and how the information may be used).

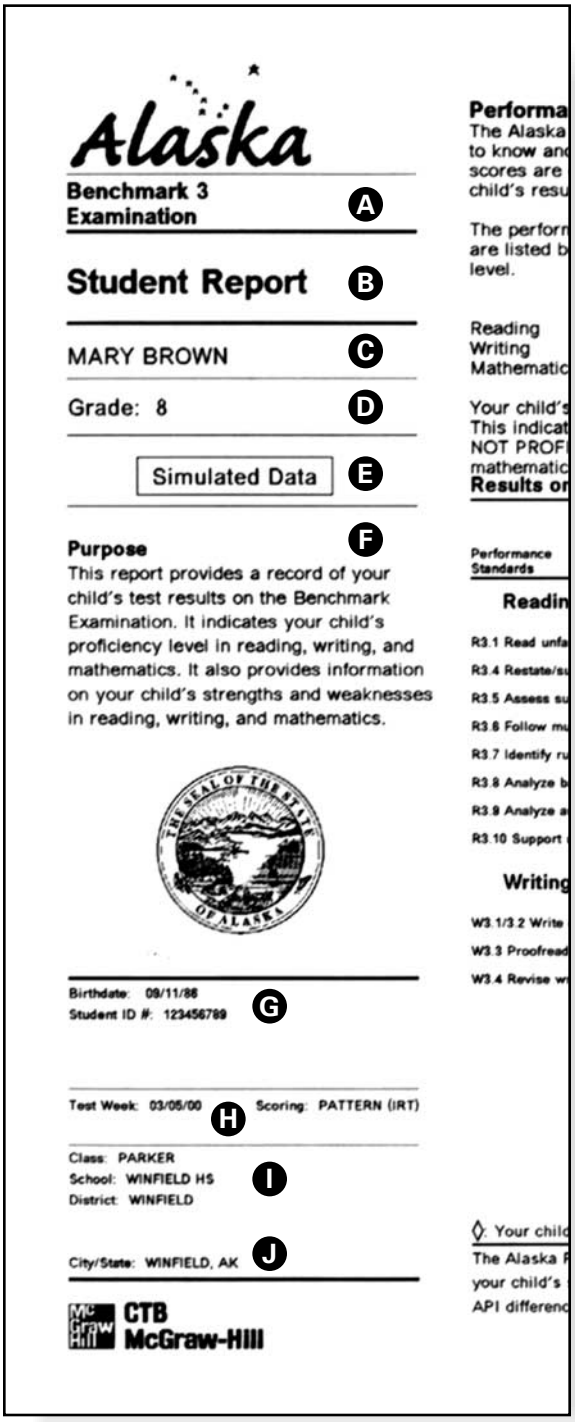
The lower part of the left panel provides the information about the test and the students. This information includes the following:

G Student's birthdate and, if reported, Student ID Number.

H The test week. Also includes scoring type.

I The class, school, and district.

J The city and state.



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Benchmark Examinations Results Labels

Individual student labels are provided for each student for each content area. These student labels indicate the student's status relative to meeting the standards in Reading, Writing, and Mathematics. Separate *green* labels are provided for each content area in which the student is Proficient or Advanced. Separate *yellow* labels are provided for each content area in which the student is Not Proficient or in another category. The reports are used for school transcripts.

MATHEMATICS BENCHMARK I RESULTS
PROFICIENT

Name: BROWN MARY — Subject: MATH
Student ID #: 123456789 — Proficient Score: 322
School: WINFIELD ES — Obtained: 395
Test Week: 03/04/02 Grade: 3 — Category: PROFICIENT

READING BENCHMARK I RESULTS
ADVANCED

Name: BENSON JIM L — Subject: READING
Student ID #: 123456789 — Proficient Score: 310
School: WINFIELD ES — Obtained: 465
Test Week: 03/04/02 Grade: 3 — Category: ADVANCED

MATHEMATICS BENCHMARK I RESULTS
NOT PROFICIENT

Name: BAILEY BOB M — Subject: MATH
Student ID #: 123456789 — Proficient Score: 322
School: WINFIELD ES — Obtained: 233
Test Week: 03/04/02 Grade: 3 — Category: NOT PROF

READING BENCHMARK I RESULTS
INVALIDATED

Name: FRANKS ALICE A — Subject: READING
Student ID #: 123456789 — Proficient Score: 310
School: WINFIELD ES — Obtained: #
Test Week: 03/04/02 Grade: 3 — Category: INV.

WRITING BENCHMARK I RESULTS
ABSENT

Name: LETTERMAN NICOLE — Subject: WRITING
Student ID #: 123456789 — Proficient Score: 352
School: WINFIELD ES — Obtained: #
Test Week: 03/04/02 Grade: 3 — Category: ABSENT

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Alaska

Benchmark 3 Examination

Performance Level Summary Report

School: BLUE LAKE

Simulated Data

Purpose

This report details the percent of students in each of the four performance levels. Instructional priorities can be established using this information along with other sources. This report can be used for partial fulfillment of Title I reporting.

No. of Students: 120 E

Test Week: 03/05/02 Scoring: PATTERN (IRT)

District: GREEN VALLEY

City/State: WINFIELD, AK

Mathematics: Benchmark 3 Proficiency Levels

Performance Levels		Percent in Level	Descriptions
4 Advanced	A	7% (8 Students)	The student can explain and defend answers, solve problems involving time zones, and use the Pythagorean Theorem; solve multi-step real-world problems; identify any missing term in a sequence; explain similarity and proportionality, use a scale factor to find new dimensions, identify errors in mathematical strategies, and use and explain geometric formulas for plane and solid figures; construct a scatter plot or graph from given data, explain and justify statistical conclusions, and determine the probability of an event occurring.
3 Proficient	B	23% (27 Students)	The student can recognize prime numbers and operations with variables and convert between numeric forms; use estimation, ratios, proportions, and graphs to solve simple word problems, add, subtract, multiply, divide fractions, decimals and percents; solve equations, describe a mathematical relationship, and explain how changing one variable affects other variables; recognize types of angles, recognize and draw similar and congruent figures, use proportionality, and plot points using ordered pairs; and use appropriate scales for graphs.
2 Below Proficient	C	50% (60 Students)	The student can read, write, and order positive and negative numbers; measure using a ruler, and convert measurements within a system; add, subtract, multiply and divide whole numbers, and write ratios and proportions; continue numeric and geometric patterns and use a line graph to predict an answer; construct and compare geometric figures, draw an object to specifications, make and use scale drawings, and recognize the results of transformations and enlargements; and interpret, analyze, and convert information found in tables and graphs.
1 Not Proficient	D	21% (25 Students)	The student is working on attaining the skills listed above.

Observations

Performance level scores provide a description of what students *can do* in terms of the content and skills assessed by the *Alaska Benchmark Examination*, which are typically found in curricula spanning Grades 7 and 8.

Students in a given performance level can perform the majority of what is described for that level and even more of what is described for the levels below. Students in Level 2 (Below Proficient) can perform the majority of what is described for that level. Students may also be capable of performing some of the things described in the next higher level, but not enough to have reached that level.

The graph above shows the number and percent of students who tested at each performance level in Mathematics on the *Benchmark 3 Examination*.

For each content area, look at the skills and knowledge described in the next higher level. These are the competencies students must demonstrate to show academic growth.

See the reverse side for a description of the *Alaska Benchmark Examination* performance levels.

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Performance Level Summary Report

This report details the percentage of students at each of the performance levels (Advanced, Proficient, Below Proficient, Not Proficient) for each content area.

A Indicates the percentage and number of students in the Advanced level (Level 4).

B Indicates the percentage and number of students in the Proficient level (Level 3).

C Indicates the percentage and number of students in the Below Proficient level (Level 2).

D Indicates the percentage and number of students in the Not Proficient level (Level 1).

E Indicates the number of students at all levels.

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Alaska

Benchmark 3 Examination

Student Report

MARY BROWN (A)

Grade: 8

Simulated Data

Purpose (B)

This report provides a record of your child's test results on the Benchmark Examination. It indicates your child's proficiency level in reading, writing, and mathematics. It also provides information on your child's strengths and weaknesses in reading, writing, and mathematics.

Birthdate: 09/11/88
Student ID #: 123456789 (C)

Test Week: 03/05/00 Scoring: PATTERN (IRT)

Class: PARKER
School: WINFIELD HS
District: WINFIELD

City/State: WINFIELD, AK

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Performance Summary

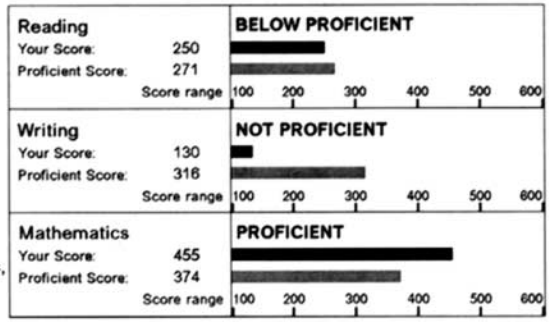
The Alaska Performance Standards represent what Alaskans want students to know and be able to do in reading, writing, and mathematics. Your child's scores are expressed as scale scores, which allow you to compare your child's results to the range of scores for each performance level.

The performance level ranges of scores for reading, writing, and mathematics are listed below. See the reverse side for a description of each performance level.

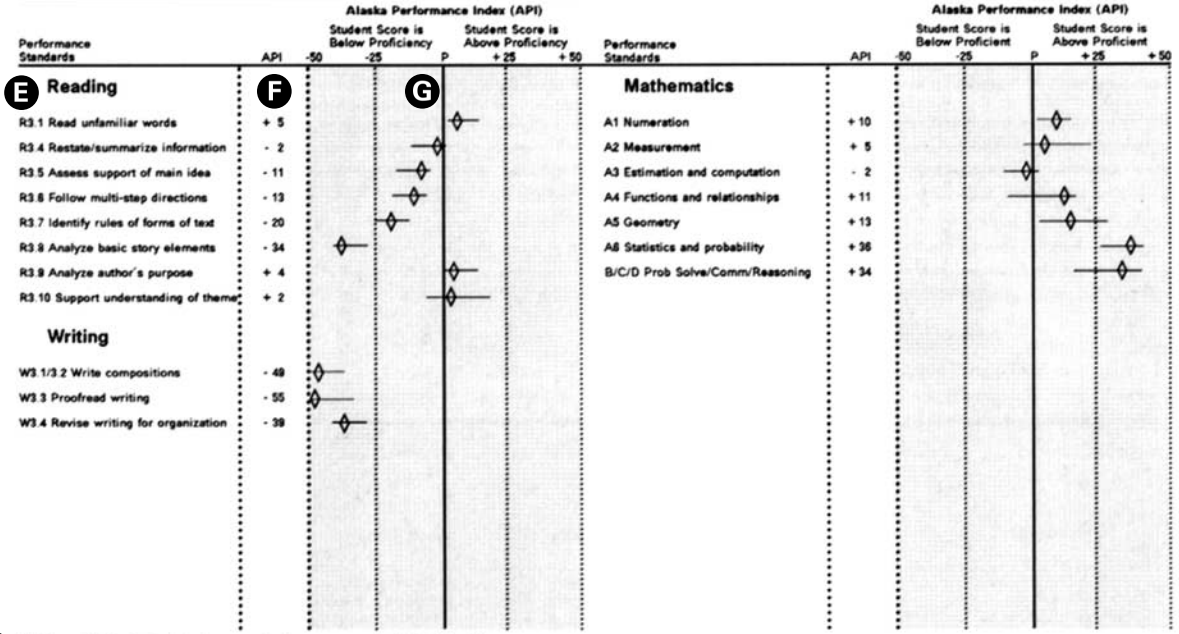
	Not Proficient	Below Proficient	Proficient	Advanced
Reading	100-232	233-270	271-324	325-600
Writing	100-190	191-315	316-415	416-600
Mathematics	100-272	273-373	374-460	461-600

Your child's scores are 250 in reading, 130 in writing, and 455 in mathematics. This indicates that your child is BELOW PROFICIENT on the reading standards, NOT PROFICIENT on the writing standards, and PROFICIENT on the mathematics standards.

Test Results (D)



Results on the Alaska Performance Standards



(H) ◊: Your child's Alaska Performance Index P: API at Proficiency

(I) The Alaska Performance Index (API) is a score indicating how well a student performed on each reading, writing and math standard. The graph shows the difference in your child's score as compared to the proficiency score. Any API difference to the right of the zero line indicates how much your child scored above proficient and any API difference to the left of the zero line indicates how much he/she scored below proficient.

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Student Report

A Presents the student's name and grade.

B Explains the reason for the report and how the information may be used.

C Indicates the student's birthdate and identification number, dates of testing, scoring type, class, school, district, city, and state.

D Explains the student's performance relative to the Alaska Performance Standards established by the Alaska Department of Education & Early Development. The bar graph illustrates the same results.

E Lists essential skills, grouped by content area.

F Presents the Alaska Performance Index (API) that the student obtained.

G Graphs the student's API relative to the standard.

H Defines symbols and acronyms used on the report.

I Explains the API.

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Alaska

Benchmark 2 Examination

School Proficiency Roster

School: WINFIELD

Simulated Data

Purpose

This report lists students alphabetically within a test section. The School Proficiency Roster, along with other information, is generally used to identify students for special programs, awards, or recognition.

No. of Students: 25*

Test Week: 03/05/02 Scoring: PATTERN (IRT)

District: GREEN VALLEY

City/State: WINFIELD, AK

A

	Reading	Writing	Mathematics
Highest Scale Score Obtained	400	516	452
Mean Scale Score (SS)	321.4	303.0	325.1
Lowest Scale Score Obtained	133	110	145
Standard Deviation	51.4	31.4	51.4
Low/High Score Possible	100-600	100-600	100-600

	Reading	Writing	Mathematics
Proficient Score	311	300	329
No./PCT Not Proficient	6 / 26%	5 / 24%	5 / 23%
No./PCT Below Proficient	0 / 0%	1 / 5%	2 / 9%
No./PCT Proficient	15 / 65%	13 / 62%	13 / 59%
No./PCT Advanced	2 / 9%	2 / 10%	2 / 9%

B C

No.	Student			Reading Score (SS)	Reading Category	Writing Score (SS)	Writing Category	Mathematics Score (SS)	Mathematics Category
1	BAILEY	ERNST	M	#	MOD	#	MOD	#	MOD
2	BAIRD	BRUCE		#	MOD	#	MOD	#	MOD
3	BENSON	JIM	L	#	MOD	#	MOD	#	MOD
4	BRADFORD	NELL		#	MOD	#	MOD	#	MOD
5	BROWN	MARY		#	MOD	#	MOD	#	MOD
6	BROWN	TONY	M	#	MOD	#	MOD	#	MOD
7	CARTER	MARCY	W	#	MOD	#	MOD	#	MOD
8	CHONG	SUE		#	MOD	#	MOD	#	MOD
9	DECKER	MERRI	M	#	MOD	#	MOD	#	MOD
10	DODSON	PAUL	L	#	MOD	#	MOD	#	MOD
11	JOHNSON	ELLEN		#	MOD	#	MOD	#	MOD
12	LETTERMAN	NICOLE		#	MOD	#	MOD	#	MOD
13	MASSY	RICHARD	N	#	MOD	#	MOD	#	MOD
14	NALLEN	EMILY	A	#	MOD	#	MOD	#	MOD
15	OTTENWALTER	MIMI		#	MOD	#	MOD	#	MOD
16	PARKER	ALICE	C	#	MOD	#	MOD	#	MOD
17	PARKER	JARROD	A	#	MOD	#	MOD	#	MOD
18	RAMIREZ	ALEX	M	#	MOD	#	MOD	#	MOD
19	RAMME	JULIE	P	#	MOD	#	MOD	#	MOD
20	ROBERTS	MARY	J	#	MOD	#	MOD	#	MOD
21	ROCKWELL	NANCY	K	#	MOD	#	MOD	#	MOD
22	SMITH	JONELLE		#	MOD	#	MOD	#	MOD
23	WAMBAUGH	CINDY	A	#	MOD	#	MOD	#	MOD
24	WILLIAMS	MIKE	W	#	MOD	#	MOD	#	MOD
25	ZWALD	NICK	F	#	MOD	#	MOD	#	MOD

D

#: No score due to invalid, omitted, or suppressed subtest
ADV: Advanced PROF: Proficient BLW PROF: Below Proficient NOT PROF: Not Proficient
INV: Invalid subtest PRF: Parent Refusal SRF: Student Refusal SUP: Suppressed MOD: Modified Administration
* Number of students for which books were returned

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School Proficiency Roster

This report lists all students in the school alphabetically, and gives the performance category of each (e.g., Proficient, Advanced) for each content area. The report also lists the scale score for each student (see Glossary for definitions).

A Provides Reading, Writing, and Mathematics summary information for the school.

B Lists students alphabetically within the school for the subjects tested.

C Provides each student's scale score and performance category for the content area.

D Defines the abbreviations used in the report.

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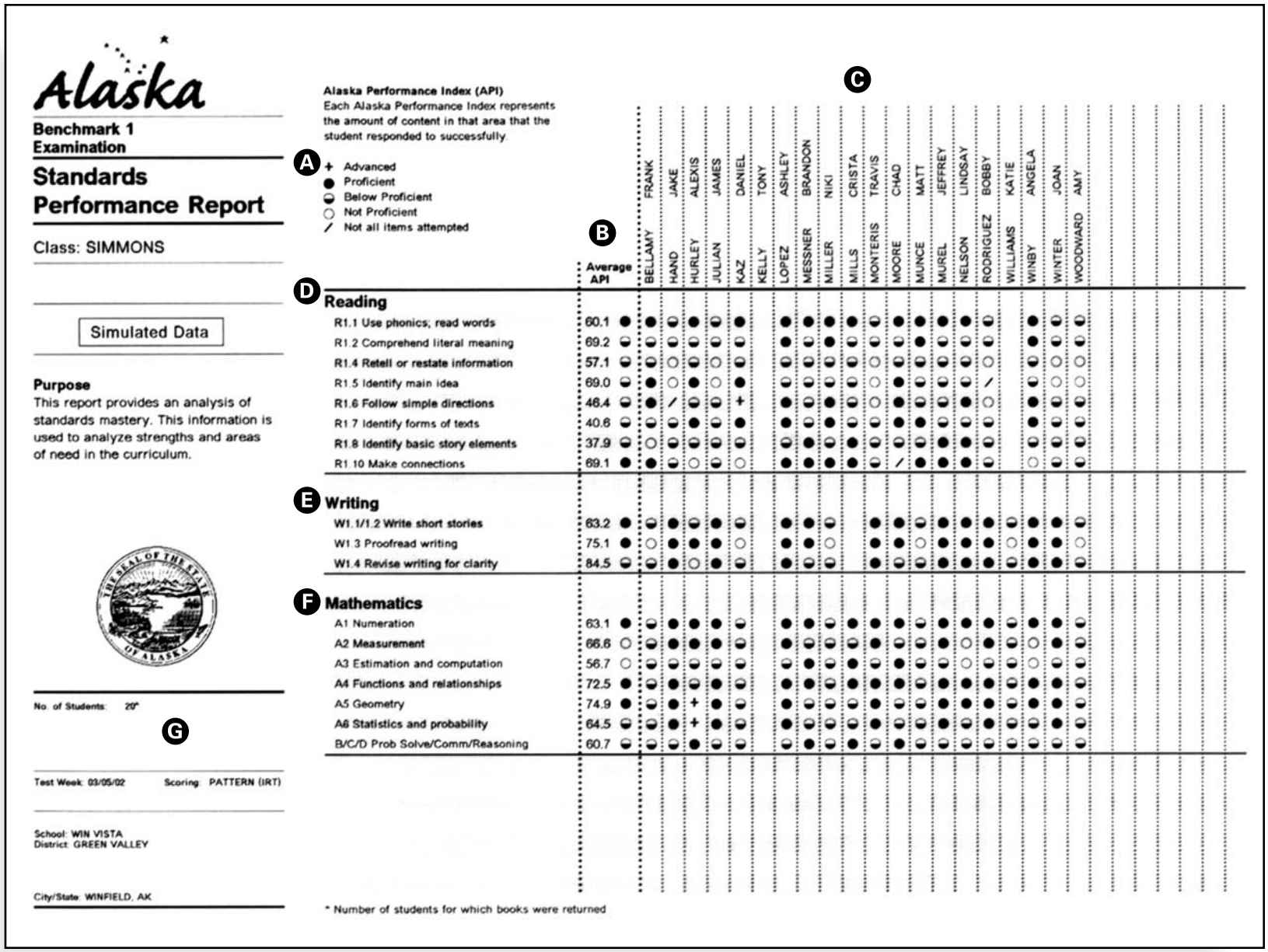

Alaska

Benchmark 1 Examination

Standards Performance Report

Class: SIMMONS

Simulated Data

Purpose
This report provides an analysis of standards mastery. This information is used to analyze strengths and areas of need in the curriculum.

No. of Students: 20*

Test Week: 03/05/02 Scoring: PATTERN (IRT)

School: WIN VISTA
District: GREEN VALLEY

City/State: WINFIELD, AK

Alaska Performance Index (API)
Each Alaska Performance Index represents the amount of content in that area that the student responded to successfully.

A
+ Advanced
● Proficient
◒ Below Proficient
○ Not Proficient
/ Not all items attempted

C

	B Average API	FRANK BELLAMY	JAKE HAND	ALEXIS HURLEY	JAMES JULIAN	DANIEL KAZ	TONY KELLY	ASHLEY LOPEZ	BRANDON MESSNER	NIKI MILLER	CRISTA MILLS	TRAVIS MONTERIS	CHAD MOORE	MATT MUNCE	JEFFREY MUREL	LINDSAY NELSON	BOBBY RODRIGUEZ	KATIE WILLIAMS	ANGELA WINBY	JOAN WINTER	AMY WOODWARD
D Reading																					
R1.1 Use phonics; read words	60.1 ●	●	◒	●	◒	●		●	●	●	●	◒	●	●	●	●	◒		●	◒	◒
R1.2 Comprehend literal meaning	69.2 ◒	◒	◒	◒	◒	◒		●	◒	●	◒	◒	◒	●	◒	◒	◒		●	◒	◒
R1.4 Retell or restate information	57.1 ◒	◒	○	◒	○	◒		◒	◒	◒	◒	○	◒	◒	◒	◒	○		◒	○	○
R1.5 Identify main idea	69.0 ◒	●	○	●	○	●		◒	◒	◒	◒	○	●	◒	◒	◒	/		◒	○	○
R1.6 Follow simple directions	46.4 ◒	●	/	◒	◒	+		●	◒	●	◒	○	●	◒	◒	●	○		●	◒	◒
R1.7 Identify forms of texts	40.6 ○	◒	◒	●	◒	●		●	○	●	◒	◒	●	◒	◒	◒	◒		●	◒	◒
R1.8 Identify basic story elements	37.9 ○	○	◒	◒	◒	◒		○	●	○	●	◒	○	◒	●	●	◒		◒	◒	◒
R1.10 Make connections	69.1 ●	●	◒	○	◒	○		●	●	●	●	◒	/	●	●	●	◒		○	◒	◒
E Writing																					
W1.1/1.2 Write short stories	63.2 ●	◒	●	◒	●	◒		●	●	◒		●	●	◒	●	●	●	◒	●	●	◒
W1.3 Proofread writing	75.1 ●	○	●	●	●	○		●	●	○		●	●	○	●	●	●	○	●	●	○
W1.4 Revise writing for clarity	84.5 ◒	◒	●	○	●	◒		●	◒	◒		●	◒	◒	●	●	●	◒	●	●	◒
F Mathematics																					
A1 Numeration	63.1 ●	◒	●	●	●	◒		●	●	◒	●	●	●	◒	●	●	●	◒	●	●	◒
A2 Measurement	66.6 ○	◒	●	●	●	◒		●	◒	◒	◒	●	◒	◒	●	◒	○	◒	●	◒	◒
A3 Estimation and computation	56.7 ○	◒	◒	◒	◒	◒		◒	●	◒	●	◒	●	◒	◒	○	◒	◒	○	◒	◒
A4 Functions and relationships	72.5 ●	◒	●	◒	●	◒		●	●	◒	●	●	●	◒	●	●	●	◒	●	●	◒
A5 Geometry	74.9 ●	◒	●	+	●	◒		●	◒	◒	◒	●	◒	◒	●	●	●	◒	●	●	◒
A6 Statistics and probability	64.5 ◒	◒	●	+	●	◒		●	◒	◒	◒	●	◒	◒	●	◒	●	◒	●	◒	◒
B/C/D Prob Solve/Comm/Reasoning	60.7 ◒	◒	◒	●	◒	◒		◒	●	◒	●	◒	●	◒	◒	◒	◒	◒	◒	◒	◒

* Number of students for which books were returned

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Standards Performance Report

This report lists all students in the school alphabetically, and gives the status of each (Advanced, Proficient, Below Proficient, Not Proficient, Not all items attempted) for each standard within a content area. The report also lists the average API for all students, for each standard.

A Defines API score and symbols used in the report.

B Indicates the average API per school, per standard.

C Lists students alphabetically within the school.

D Provides Reading information by standard, for each student.

E Provides Writing information by standard, for each student.

F Provides Mathematics information by standard, for each student.

G Indicates the number of students for whom books were returned.

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Alaska

Benchmark 1 Examination

Standards Performance Summary

School: SCHOOL A

Simulated Data

Purpose

This report provides an analysis of group standards mastery using the percent of students mastering each standard and average Alaska Performance Indexes (API) for this group. The information may be used to analyze strengths and areas of need in the curriculum.

No. of Students: 138*

C

Test Week: 03/05/02 Scoring: PATTERN (IRT)

District: GREEN VALLEY

City/State: WINFIELD, AK

Standards Performance by Class - Proficient

B

Alaska Performance Index (API)
Each Alaska Performance Index represents the amount of content in that area that the students responded to successfully.

Alaska Standards Scale
0-100

Percent of Students Proficient at Each Standard

	School Percent Proficient	Class Percent Proficient: CLASS A	CLASS B	CLASS C	CLASS D	CLASS E
A **Reading**						
R1.1 Use phonics; read words	43.1	45	52	42	36	48
R1.2 Comprehend literal meaning	43.7	47	44	38	36	52
R1.4 Retell or restate information	28.5	30	42	38	21	22
R1.5 Identify main idea	18.7	16	52	29	7	15
R1.6 Follow simple directions	62.1	47	65	63	57	63
R1.7 Identify forms of texts	57.8	39	58	58	57	56
R1.8 Identify basic story elements	45.0	32	63	50	36	44
R1.10 Make connections	58.2	40	68	46	64	67
Number of Students Tested:	128	30	25	27	17	29
Writing						
W1.1/1.2 Write short stories	35.1	19	58	21	29	52
W1.3 Proofread writing	77.7	55	58	79	71	78
W1.4 Revise writing for clarity	98.3	23	54	46	57	52
Number of Students Tested:	125	29	21	27	19	29
Mathematics						
A1 Numeration	85.6	65	60	92	100	85
A2 Measurement	95.7	87	58	96	65	96
A3 Estimation and computation	85.3	62	63	38	48	85
A4 Functions and relationships	43.8	47	44	29	63	52
A5 Geometry	28.2	30	42	63	21	22
A6 Statistics and probability	18.1	16	62	58	57	15
B/C/D Prob Solve/Comm/Reasoning	62.0	47	65	50	57	63
Number of Students Tested:	122	32	25	24	14	27

* Number of students for which books were returned

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Standards Performance Summary

This five-part report summarizes information at the school level, by content area. The report indicates the API required to be Proficient at each standard and the school average API.

A Lists the performance standards by content area.

B Indicates API percentage for school and by class.

C Indicates the number of students for whom books were returned.

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BENCHMARK 1

Reading

Use reading strategies to read text

The below proficient student

- uses knowledge of phonics to recognize the sounds of letters and letter combinations, including beginning consonant and vowel blends in words.
- uses picture clues and prior knowledge to understand the meaning of basic phrases.

The proficient student

- uses prior knowledge and context clues to determine the meaning of words and phrases.

The advanced student

- determines the meaning of unfamiliar phrases in a text with regional vocabulary using context clues.

Comprehend literal meaning

The below proficient student

- identifies information stated directly in the text.

The proficient student

- identifies the behaviors and actions of a character.

The advanced student

- identifies a statement in the text that supports a conclusion.

Restate information

The proficient student

- restates key ideas that appear in the text.

The advanced student

- draws a conclusion from facts stated in the text.

Identify main idea

The below proficient student

- identifies the main idea in a simple story.

The proficient student

- identifies the main idea, lesson learned, or central concept in various types of texts.

The advanced student

- states the main idea of an advanced informational text.

Follow simple directions

The proficient student

- identifies the basic sequence of steps in a list of directions.

The advanced student

- writes about the details involved in the steps in a list of directions and their sequence.

Identify forms of texts

The advanced student

- identifies type of text (e.g., poetry, fiction, nonfiction, drama).
- identifies a likely source of a text.

Identify basic story elements

The below proficient student

- describes one or two story elements (setting, character, plot) in a simple story.

The proficient student

- describes most of the story elements (setting, character, plot) in a variety of stories.
- makes inferences about character traits and feelings.

Make connections

The below proficient student

- makes simple connections and applies prior knowledge to understand basic ideas.
- makes predictions about a future event in a simple text.

The proficient student

- uses details provided in the text to make predictions about different situations.

The advanced student

- synthesizes information provided in the text to continue the story.

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BENCHMARK 1

Writing

Write a short story

The below proficient student

- writes simple sentences to respond to a writing prompt.
- partially edits writing.
- identifies the subject and verbs in sentences.
- identifies complete sentences.

The proficient student

- writes a story that addresses the topic of a prompt and includes a beginning, middle, and end.
- writes a paragraph with supporting details.
- uses some writing conventions correctly.
- identifies correct subject/verb agreement.
- recognizes verb tenses.

The advanced student

- writes a story for a specific audience while consistently using
  - voice.
  - organization.
  - correct conventions.
  - specific and vivid word choice.
  - sentence fluency.
- uses correct punctuation in own writing.

Proofread writing

The below proficient student

- identifies some simple mistakes in high-frequency spelling words, capitalization at the beginning of a sentence, and ending punctuation for statements.

The proficient student

- identifies and corrects basic mistakes in
  - high-frequency spelling words, including high-frequency homophones.
  - capitalization, including book titles.
  - ending punctuation for questions.

The advanced student

- Identifies and corrects most errors in
  - spelling, including homophones.
  - capitalization, including proper names.
  - punctuation, including a variety of ending punctuation, contractions, possessives, dates, place names, clauses, and compound sentences.

Revise writing for clarity

The proficient student

- combines related sentences for purposes of clarity without changing their meaning.

The advanced student

- identifies the use and purpose of exclamation points and quotation marks in dialogue.
- combines and punctuates two sentences, with and without conjunctions, while retaining their original meaning.
- revises and writes for detail and clarity.

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BENCHMARK 1

Mathematics

Numeration

The below proficient student

- uses number words that show order (first, second, third, etc.).
- identifies and writes missing numbers in a counting sequence to 1,000.
- represents and identifies place values from 1s to 1,000s.
- identifies even and odd numbers.

The proficient student

- compares and orders numbers.
- writes numbers to the ten-thousands place using words.

The advanced student

- identifies fractions as part of a set.
- uses everyday language to explain own thinking about solutions to problems.

Measurement

The below proficient student

- combines sets of coins to determine values under $1.00.
- uses a ruler to accurately measure objects to specified whole units.

The proficient student

- uses a ruler to accurately measure objects to the nearest half-inch.
- uses a ruler to draw a line segment to a specified length.

The advanced student

- determines the value of a given set of coins over $1.00 and writes it in correct notation.
- applies problem-solving strategies to determine a specific date on a calendar.
- chooses the appropriate unit to measure a given item.
- uses an analog clock to read time to the quarter hour and finds elapsed time.
- compares and orders objects.

Estimation and Computation

The below proficient student

- chooses a strategy to estimate.
- accurately rounds to the nearest 10.
- solves a problem using repeated addition or multiplication.

The proficient student

- subtracts whole numbers with regrouping.
- translates a model of multiplication into an appropriate numeric representation.
- estimates the value of the whole given the value of a part.
- translates problems from everyday language into mathematical language and symbols.
- develops and applies strategies to solve a variety of problems.

The advanced student

- uses mathematical models to solve a problem.
- discriminates between useful and non-useful information in problems.
- adds and subtracts whole numbers to three digits with regrouping.
- solves multi-step problems.
- represents division as sharing equally.

Functions and Relationships

The below proficient student

- recognizes, describes, and creates an extension of geometric patterns.
- completes sentences with missing numbers.

The proficient student

- generates and solves simple functions involving addition and subtraction.
- predicts an answer before solving a problem and checks answers for reasonableness.
- uses everyday language to explain reasoning about a problem.

The advanced student

- develops and applies a rule to solve a problem.
- applies strategies to a given story problem to extend a pattern.

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BENCHMARK 1

Mathematics, cont'd

Geometry

The below proficient student

- identifies shapes.
- identifies and draws lines of symmetry.
- identifies geometric shapes in a given position.

The proficient student

- identifies, sorts, and describes common characteristics of a given set of objects.
- uses mathematical language to explain conclusions.
- identifies simple transformations (slides, flips, and turns).
- sorts a set of geometric shapes according to given characteristics.

The advanced student

- combines shapes to make a new shape.
- demonstrates knowledge of area.
- demonstrates problem-solving skills using geometric shapes.

Statistics and Probability

The below proficient student

- reads and transfers information from a table to a pictograph or bar graph.
- labels and displays data on a pictograph or bar graph.
- interprets data from a graph or table.
- uses everyday language to explain graphical data.
- uses graphs and tables to represent mathematical information.
- draws conclusions about information presented in tables or graphs.

The proficient student

- determines which graph accurately displays a given set of data.
- draws conclusions about mathematical problems.

The advanced student

- determines the most likely outcome in a test of simple probability.
- determines the probability of a given event.
- finds examples that support or refute mathematical statements.

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BENCHMARK 2

Reading

Use reading strategies to determine meaning

The below proficient student

- uses context clues, understands and relates multiple meanings of words, and demonstrates an understanding of synonyms.

The proficient student

- uses word origins to determine the meaning of unfamiliar words and identifies multiple synonyms of a word.

The advanced student

- reads for information (i.e., uses tables and headings according to the purpose or task).

Infer meaning and identify themes

The below proficient student

- infers the meaning of figurative language from the text, recognizes themes, and identifies similarities between various situations.

The proficient student

- explains an author's meaning.

The advanced student

- infers the author's meaning from the text.

Summarize information

The below proficient student

- finds and restates detail from the text.

The proficient student

- summarizes information from the text.

Connect main ideas

The below proficient student

- identifies a main idea and provides some supporting details.

The proficient student

- makes connections between the main ideas and concepts in one passage to related topics and provides supporting details.

The advanced student

- uses prior knowledge to support and justify an author's main ideas.

Follow multi-step directions

The below proficient student

- differentiates and logically organizes steps in a set of directions.

The proficient student

- interprets and applies information from a key.

The advanced student

- interprets complex directions to understand and solve problems.

Describe forms of texts

The proficient student

- shows understanding of a variety of types of texts (e.g., identifies the characteristics of a poem, recognizes fiction vs. nonfiction, identifies the type of literature).
- identifies the meaning of figurative language.

The advanced student

- predicts story outcomes based on knowledge of types of literature, and explains the differences between fiction and nonfiction.

Define basic story elements

The below proficient student

- demonstrates understanding of story elements (e.g., identifies main characters, plots, and settings), compares different plots, settings, and characters.

The advanced student

- discriminates between main plot and subplots, main and minor characters, and elements of a setting in a written selection.

Differentiate fact from opinion

The proficient student

- draws conclusions and critiques text (i.e., clarifies and expresses opinions based on text).

The advanced student

- analyzes the author's opinion or point of view and supports opinions with information from the text.

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BENCHMARK 2

Writing

Write about a topic

The below proficient student

- writes a topic, idea, or story line that is loosely defined.
- writes with simple sentences and sentence fragments.

The proficient student

- writes on a topic with broad development.
- develops the topic in a somewhat organized manner.
- uses accurate but simple sentence construction.
- uses conventions that are mostly correct and includes errors that do not interfere with meaning.
- makes word choices that are appropriate but may not be colorful or figurative.
- uses limited but relevant supporting details.
- demonstrates awareness of audience and voice.

The advanced student

- defines and develops the topic in a logical, sequential way.
- uses a variety of sentence lengths and structures.
- makes few, if any, errors in conventions.
- chooses words that are accurate and colorful, including some figurative language.
- uses supporting details that are relevant.
- writes with clear voice.

Proofread writing

The below proficient student

- locates and corrects the most obvious common spelling, punctuation, and grammatical errors in a written passage.

The proficient student

- locates and corrects errors in
  - spelling.
  - punctuation.
  - verb, pronoun, and homonym usage.
  - punctuation of contractions.
  - subject/verb agreement.
  - comparative adjectives.
  - sentence fragments.

The advanced student

- consistently locates and corrects errors in spelling, punctuation, and grammar.
- identifies structural errors in more complex sentences.
- correctly uses adverbs of comparison, appropriate verb tense, and pronouns referring to antecedents.

Revise writing to provide supporting detail

The below proficient student

- combines simple sentences to eliminate repetition.

The proficient student

- combines sentences using conjunctions to make writing concise.
- improves paragraph structure by adding supporting details in appropriate locations.

The advanced student

- combines sentences to clarify relationships between ideas.
- eliminates irrelevant sentences from paragraphs.
- provides relevant details to support a topic sentence.

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BENCHMARK 2

Mathematics

Numeration

The below proficient student

- models and identifies place-value positions from hundredths to ten thousands.
- identifies multiples of numbers such as three, four, and five.
- reads and writes positive whole numbers.

The proficient student

- identifies and describes factors and multiples common to a set of numbers.
- identifies place-value positions from thousandths to millions.

The advanced student

- solves multi-step problems that involve factors and multiples.

Measurement

The below proficient student

- estimates and measures the dimensions of a geometric figure.
- determines elapsed time using clocks.
- estimates and measures fractions of units of measurement.
- chooses appropriate units of measurement in metric or standard units.
- recognizes the values of coins and fractional parts of a dollar.
- combines coins to equal a required amount.

The proficient student

- uses equivalent measures to compare objects.
- solves one-step problems involving measurement of volume.
- shows a strategy to solve problems involving time and distance.

The advanced student

- solves multi-step problems involving measurement of length.

Estimation and Computation

The below proficient student

- adds and subtracts whole numbers and decimals, including money amounts.
- recalls and uses basic multiplication and division facts.

The proficient student

- solves multi-step problems involving addition and subtraction of whole numbers and decimals, including amounts of money.
- uses a scale drawing to solve a problem.
- adds and subtracts fractions with common denominators.
- finds equivalent fractions.
- solves multi-step problems to determine fractional parts of a set.

The advanced student

- determines a scale from given information.
- uses a scale containing fractions to solve a problem.

Functions and Relationships

The below proficient student

- solves simple problems by determining and applying a basic pattern.
- uses patterns to make predictions.
- completes sentences with missing numbers.
- determines and extends a geometric pattern.

The proficient student

- determines and extends more complex numerical patterns.

The advanced student

- analyzes an alternating numerical pattern and explains how to determine a missing number.
- analyzes numeric patterns to identify missing numbers.
- solves mathematical equations for unknowns using greater than, less than, and equal to notation.

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BENCHMARK 2

Mathematics, cont'd

Geometry

The below proficient student

- identifies properties of geometric shapes.

The proficient student

- identifies parallel lines.
- identifies and uses mathematical vocabulary to describe geometric transformations.

The advanced student

- interprets directions accurately.
- describes methods for finding area and perimeter of shapes.
- identifies characteristics of solid figures including number and shapes of faces.
- identifies line segments, and intersecting and perpendicular lines.
- identifies types of angles within geometric figures.
- identifies transformation of geometric figures describing motions.

Statistics and Probability

The below proficient student

- starts the construction of a graph by labeling the axes or providing a title.

The proficient student

- interprets a graph.
- establishes a consistent graphing scale and accurately graphs some given data.
- determines whether a game is mathematically fair or unfair.

The advanced student

- makes a graph with only minor errors.
- determines the average of a set of three-digit numbers.
- explains how the outcome of a probability problem can be changed.

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BENCHMARK 3

Reading

Read unfamiliar words

The below proficient student

- uses context clues to define words.

The proficient student

- applies knowledge of word origin and/or context clues to determine the meaning of a word.
- uses context clues to determine the meaning of jargon.

The advanced student

- uses context clues to determine the meaning of a new word and to comprehend text.

Support understanding of theme

The proficient student

- selects the correct description of the theme of an essay.
- gives a general explanation of the point of view of a character, citing one main point.
- makes inferences to interpret a statement in an article or story.
- draws conclusions about a character's point of view in a poem.

The advanced student

- interprets complex sentences to determine the correct interpretation of a theme.

Restate or summarize information

The below proficient student

- summarizes or restates specific points of an article or a poem.
- determines what an interview or a story is about.

The proficient student

- restates a main point from a poem.
- makes a comparison based on information in an article.

The advanced student

- analyzes a group of statements.
- restates information from a complex text.
- identifies a correct summary of the main idea of an article.

Assess support for main idea

The below proficient student

- locates and selects evidence that supports a statement.

The proficient student

- infers the main idea from events in a story.
- identifies a correct restatement of the main idea of a story.

The advanced student

- assesses and compares information from different sources.
- identifies multiple examples of support for a main point in an article.
- analyzes, assesses, and compares statements to identify the main idea.
- establishes support for a complex statement.

Follow multi-step directions

The below proficient student

- follows simple directions to determine what information is asked for on a simple form.
- identifies where information belongs on a simple form.

The advanced student

- understands terminology needed to complete an application form.

Identify rules of forms of texts

The proficient student

- identifies the technique used to promote a point of view in an article.

The advanced student

- identifies the type of text.

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BENCHMARK 3

Reading, cont'd

Analyze basic story elements

The below proficient student

- determines a character's point of view in a text.
- finds evidence to support a character's stated point of view.
- identifies the motivation of a character in a text.

The proficient student

- retells a story from a different point of view using more than one supporting detail.
- draws a conclusion about a person based on a statement made in an interview.
- compares characters in a play.

The advanced student

- retells a story from a different point of view using three or more supporting details.
- draws conclusions from more challenging texts and whole passages.

Analyze author's purpose

The below proficient student

- makes a simple inference from an article.

The advanced student

- identifies an implied opinion.
- identifies the cause of a change in tone.
- interprets a complex phrase.
- interprets complex sentences to support a theme.
- analyzes an author's technique to determine the author's purpose.

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BENCHMARK 3

Writing

Write compositions

The below proficient student

- writes a topic, idea, or story line that is loosely defined.
- writes with simple sentences and sentence fragments.

The proficient student

- writes a composition with a clear main idea.
- uses relevant supporting details.
- attempts a logical, sequential organization (beginning, middle, end).
- chooses the appropriate form of writing (persuasion, information, description) to respond to the prompt.

The advanced student

- writes a composition with a clear main idea and well-developed support.
- uses thoughtful transitions to connect ideas.
- organizes the ideas to flow smoothly with an inviting introduction, satisfying conclusion, and appropriate use of occasional moments that surprise, amuse, or move the reader.
- displays a keen awareness of audience.

Proofread writing

The below proficient student

- uses basic punctuation, spelling, and grammar.
- uses simple sentence structures.

The proficient student

- identifies and corrects errors in
  - punctuation (comma placement, end marks).
  - spelling (contractions, homophones).
  - grammar (possession, verb tense, run-on sentences, subject/verb agreement, transition words).
- identifies and combines complex sentences, simple sentences, and clauses.
- corrects sentence structure errors, including misplaced modifiers and lack of internal consistency.

The advanced student

- consistently corrects errors in punctuation, spelling, and grammar.
- corrects a wide variety of sentence structure and grammar errors.

Revise writing for organization

The proficient student

- organizes a paragraph by
  - placing sentences in logical order.
  - combining short, simple sentences into a single sentence to eliminate redundancy and make writing smoother.
  - identifying the most relevant sentence to add to a paragraph.

The advanced student

- organizes a paragraph by
  - eliminating sentences that are off-topic.
  - selecting appropriate details to support a topic sentence.
  - combining contrasting sentences using conjunctions that show the relationship of the ideas.

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BENCHMARK 3

Mathematics

Numeration

The below proficient student

- orders positive and negative numbers.
- reads and writes large numbers in many forms, including exponents and expanded form.

The proficient student

- recognizes the properties of addition, subtraction, and multiplication with numbers and variables.
- converts between fractions, decimals, and percents.
- recognizes prime numbers.

The advanced student

- explains what a prime number is.

Measurement

The below proficient student

- uses a ruler to measure lengths.
- converts measurements within a given measuring system.

The proficient student

- solves problems involving elapsed time.
- accurately reads a measurement tool.

The advanced student

- explains and defends solutions using appropriate vocabulary.
- solves problems involving time zones.
- uses the Pythagorean Theorem ($a^2 + b^2 = c^2$).
- determines the circumference of a circle.

Estimation and Computation

The below proficient student

- accurately adds, subtracts, multiplies, and divides whole numbers.
- uses mathematical symbols to represent information in problems.
- writes a ratio or proportion.

The proficient student

- uses estimation to solve problems.
- adds, subtracts, multiplies, and divides fractions, decimals, and percents.
- solves one-step real-world word problems.
- uses ratios and proportions to solve problems.
- uses appropriate symbols to explain and justify an answer.

The advanced student

- solves multi-step real-world word problems involving such topics as discount and sales tax.

Functions and Relationships

The below proficient student

- identifies numeric and geometric patterns to predict the next item in a pattern.
- uses the information in a line graph to predict an answer.

The proficient student

- solves multi-step algebraic expressions and equations containing one variable.
- identifies and describes how a change in one variable affects other variables.
- adds, subtracts, and multiplies algebraic expressions.
- finds a missing number within a sequence.
- uses known facts to analyze a problem and determine unknown information.

The advanced student

- identifies any term of a sequence.

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BENCHMARK 3

Mathematics, cont'd

Geometry

The below proficient student

- constructs and compares geometric figures.
- draws and measures an object.
- makes and uses scale drawings.
- recognizes the results of transformations and enlargements.

The proficient student

- recognizes right, acute, and obtuse angles.
- recognizes, compares, and draws similar and congruent figures.
- shows the use of proportionality.
- uses ordered pairs to plot points on a grid.

The advanced student

- explains similarity and proportionality.
- uses a scale factor to find new dimensions.
- identifies errors in mathematical strategies.
- uses and explains geometric formulas for plane and solid figures.

Statistics and Probability

The below proficient student

- interprets and analyzes information found in tables, charts, and graphs and converts or displays the information in other forms.

The proficient student

- selects and uses appropriate scales for graphs.
- selects appropriate data from a table or graph and uses it to solve a problem.

The advanced student

- constructs a graph from given data.
- explains and justifies statistical conclusions.
- determines the probability of an event.

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Glossary

Alaska Performance Index (API)
A score indicating how well a student performed on each reading, writing, and math standard.

Constructed-Response Item
An assessment unit with directions, a question, or a problem that elicits a written, pictorial, or graphic response from a student. Sometimes called an "open-ended" item. A constructed response can be short or extended, depending on the length of the response.

Content Standard
A statement or description of the knowledge and skills in a content area (e.g., language arts, mathematics, science, or social studies) that should be taught in school and assessed in a test.

Item
One of the assessment units, usually a problem or a question, in a test.

Mean
An average, calculated by adding the values of a set of scores and dividing by the number of scores in the set.

Metric
A measure based on a standard.

Multiple-Choice Item
See **Selected-Response Item.**

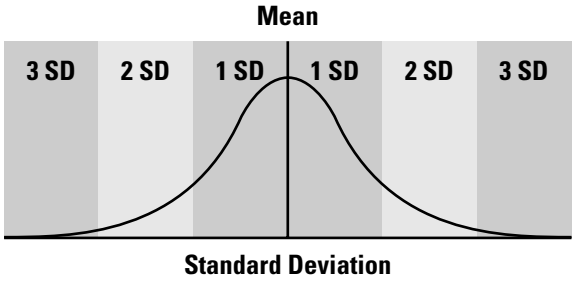
Performance Level
A score that measures a student's current acquired knowledge and skills in a particular content area (e.g., reading, mathematics).

Performance Standard
A level of performance on a test established by education experts as a goal of student attainment.

Scale Score
A three-digit integer that provides a common metric for expressing student performance.

Selected-Response Item
A question or incomplete statement that is followed by answer choices, one of which is the correct or best answer. Also referred to as a "multiple-choice" item.

Standard Deviation (SD)
A statistic that indicates the amount of variability in a group of scores. When scores are normally distributed (i.e., when they are part of a bell-shaped, "normal" curve), about two-thirds of the scores are within one SD above and below the average (mean) score, and about 95% of scores are within 2 SDs of the mean. In almost any shaped distribution, all scores will be within 5 SDs of the mean score.



Standard Error of Measurement
A mathematical calculation that defines a range within which a student's "true score" would fall, had that student taken the test numerous times. It is important to understand that all tests have an inherent measurement error because they are a sample of student performance at one particular time.

Standardized Test
A test administered in accordance with explicit directions for uniform administration.

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Score Report–Fax Form

Please fax inquiries regarding the enclosed score reports to the Alaska contract team at CTB/McGraw-Hill, using the form below. A team member will research your question and contact you within 48 hours of receiving this fax.

FAX TO 1-800-282-4279

Before Faxing CTB

Our Alaska contract team members will be able to answer your questions quickly and accurately if you provide the following information *(please print clearly)*:

Contact person's name: _____

The telephone number where contact person can be reached: _____

FAX number: _____

The name and code of the school(s) in question: _____

_____

The category of help needed: _____

For example:

- Clarification of Score Report
- Incorrect Score Report Received
- School Summary Report Missing
- Student Score Report Missing (please include Student ID #s below)

Grade(s): _____ Content Area(s): _____

Question: _____

_____

_____

_____

_____

Answer: _____

_____

_____

_____

_____

Please include School Name and School Code on any additional pages included with this fax.

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